AR Record

RMRS
Rocky Mountain
Remediation Services, L.L.C.
. . . protecting the environment
Rocky Flats Environmental Technology Site
P.O. Box 464
Golden, Colorado 80402-0464
Phone: (303) 966-7000

March 30, 1999

Alan Rodgers
Waste and Remediation Operations
Kaiser-Hill, L.L.C
Building 130

MOUND SITE PLUME SECOND QUARTER REPORT MILESTONE COMPLETION - JEL-039-99

This correspondence is to notify you of the satisfactory completion by Rocky Mountain Remediation Services (RMRS) of the Mound Site Plume Second Quarter Report to the Department of Energy (DOE). This is a WAD 83 internal milestone, WBS element 1.1.03.08.03.02.

The document was delivered to the DOE and Kaiser-Hill on March 30, 1999 (see attached letter). If you have any questions concerning completion of the milestone for the Mound Site Plume Second Quarter Report, please contact Annette Primrose at extension 4385.

John E. Law
Vice President, South Side and ER Projects

ALP/aw

Attachment:
As Stated

Cc:
J. L. Butler
C. D. Cowdery
T. Greengard
S. Mills
M. Peters
A. L. Primrose

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CORRES. CONTROL
LTR. NO.
Originator Ltr Log #
ALP-013-99
98 - RF - 01246

DIST.	LTR	ENC
BENSON, C.A.		
CARMEAN, C.H.		
CRAWFORD, A.C.		
DAWSON, D.		
FINDLEY, M.E.		
FITZ, R.C.		
GUINN, L.A.		
HUGHES, F.P.		
LAW, J. E.	✓	✓
MILLS, STEVE		
OVERLID, T. W.		
PATTERSON, J. W.		
SUTTON, S. R.		
TRICE, KELLY		
WHEELER, M.		
Benaffield, M	✓	✓
Crowley, C	✓	✓
Primrose, A	✓	✓
RMRS RECORDS	X	X
RF CORRES. CONTROL	✓	
TRAFFIC		
PATS/T130G		

CLASSIFICATION:

UCNI		
UNCLASSIFIED	✓	
CONFIDENTIAL		
SECRET		

DOCUMENT CLASSIFICATION
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Date: 3-30-99
IN REPLY TO RF CC NO.:
ACTION ITEM STATUS:
PARTIAL/OPEN
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LTR APPROVALS:
ORIG. & TYPIST INITIALS: 2

March 30, 1999

99-RF-01246

Norma Castañeda
ES&H Program Assessment
DOE, RFFO

TRANSMITTAL OF QUARTERLY STATUS REPORT FOR THE MOUND SITE PLUME PROJECT – ALP-013-99

Action: Delivery of Quarterly Status Report for the Mound Site Plume Treatment Project by March 31, 1999.

Rocky Mountain Remediation Services (RMRS) is pleased to deliver the attached copy of the quarterly Report for the Mound Site Plume Treatment project as per the Mound Site Plume IM/IRA. This is also in fulfillment of the scheduled milestone due March 31, 1999.

If there is any additional information you would like to have incorporated into the existing format for the next quarter's project report, please do not hesitate to contact Annette Primrose at extension 4385 or pager 212-6338.

A. L. Primrose
Project Manager
Groundwater Remediation

Original and 1 cc – N. Castañeda

Attachment:
As Stated

Cc:
J. L. Butler, Kaiser-Hill
T. C. Greengard, Kaiser-Hill

RF/RMRS-99-344.UN

QUARTERLY REPORT
FOR THE
MOUND SITE PLUME TREATMENT PROJECT

January Through March 1999

March 30, 1999

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INTRODUCTION

The Mound Site Plume Treatment System collects and treats the contaminated groundwater plume derived from the Mound Site to the Groundwater Action Level Framework Tier II level concentrations defined in the Rocky Flats Cleanup Agreement (RFCA) (DOE, 1996), and demonstrates the feasibility of using this system on other contaminated groundwater plumes. The components of the Mound Site Plume System are shown on Figure 1.

The Mound Site Plume Treatment Project was a cooperative effort between RFETS and the Department of Energy Subsurface Contaminant Focus Area (EM-50), with support from the US Environmental Protection Agency (EPA) SITE Program. The Mound Site Plume Treatment Project employs innovative technology for the collection and treatment of contaminated groundwater containing chlorinated organic contamination and low levels of radionuclides.

This report covers the activity and available data for the quarter from January 1, 1999 to March 31, 1999. Included in this report are the analytical results for samples collected in the previous quarter, but which were not available in time to be included in the last quarterly report. There are no safety issues for this reporting period.

PROJECT EVENTS

Raking of the iron in the two treatment cells continues along with water level monitoring, and sample collection by the EPA SITE Program (performed by TetraTech). Each of the two treatment cells contains 8 feet of iron filings that act as the treatment medium for the contaminated water. The surface of the iron filings requires regular raking to prevent formation of a crust. The crust continues to form and requires mechanical disruption in Reactor Cell 1. No crust has been observed in Reactor Cell 2. The piezometers for monitoring upgradient and downgradient water levels were installed during this quarter. Installation of these 7 piezometers was completed on January 7, 1999.

TREATMENT EFFECTIVENESS

Flow rates from the treatment system for the December-March period are shown on Figure 2. The higher flow rates in late December correspond to a storm event; the steadily increasing flow rates correspond to the beginning of the wet season.

Water levels within the collection trench are monitored by 5 piezometers (P1 through P5). Locations are shown on Figure 1 with the results shown in Table 1. These data indicate that the east side of the collection trench is dry, as was anticipated. This side of the plume was believed to be dry prior to installation of the collection system. Water levels from the piezometers up- and downgradient of the collection trench were measured weekly for the first month, and are now measured monthly. These results are also shown in Table 1.

The total flow volume through the system as of March 26, 1999 was 55,102 gallons of water. The average flow rate for January through March was 0.28 gallons per minute.

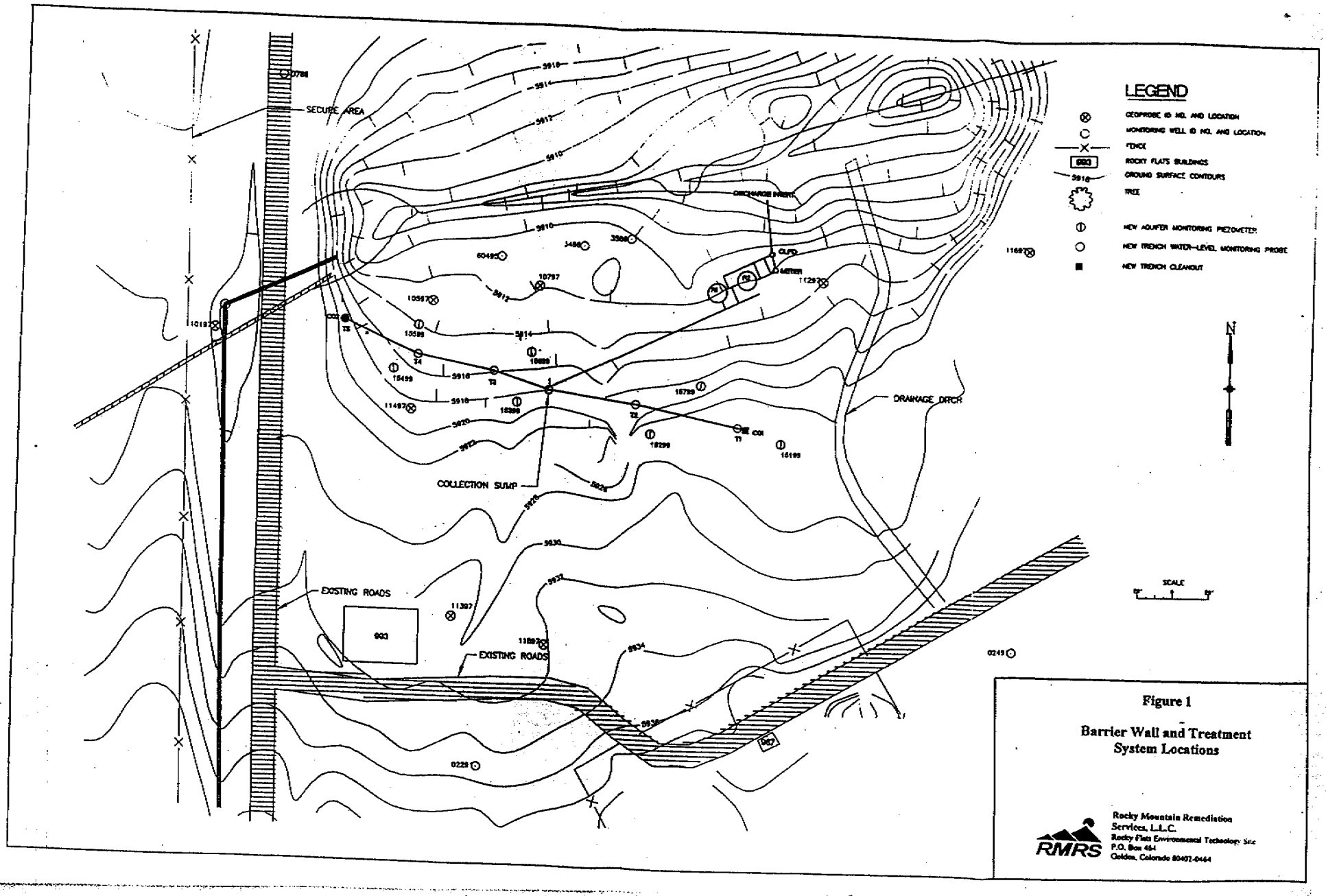

Figure 1

Barrier Wall and Treatment System Locations

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Figure 2. Mound Plume Treatment System Flow Rates

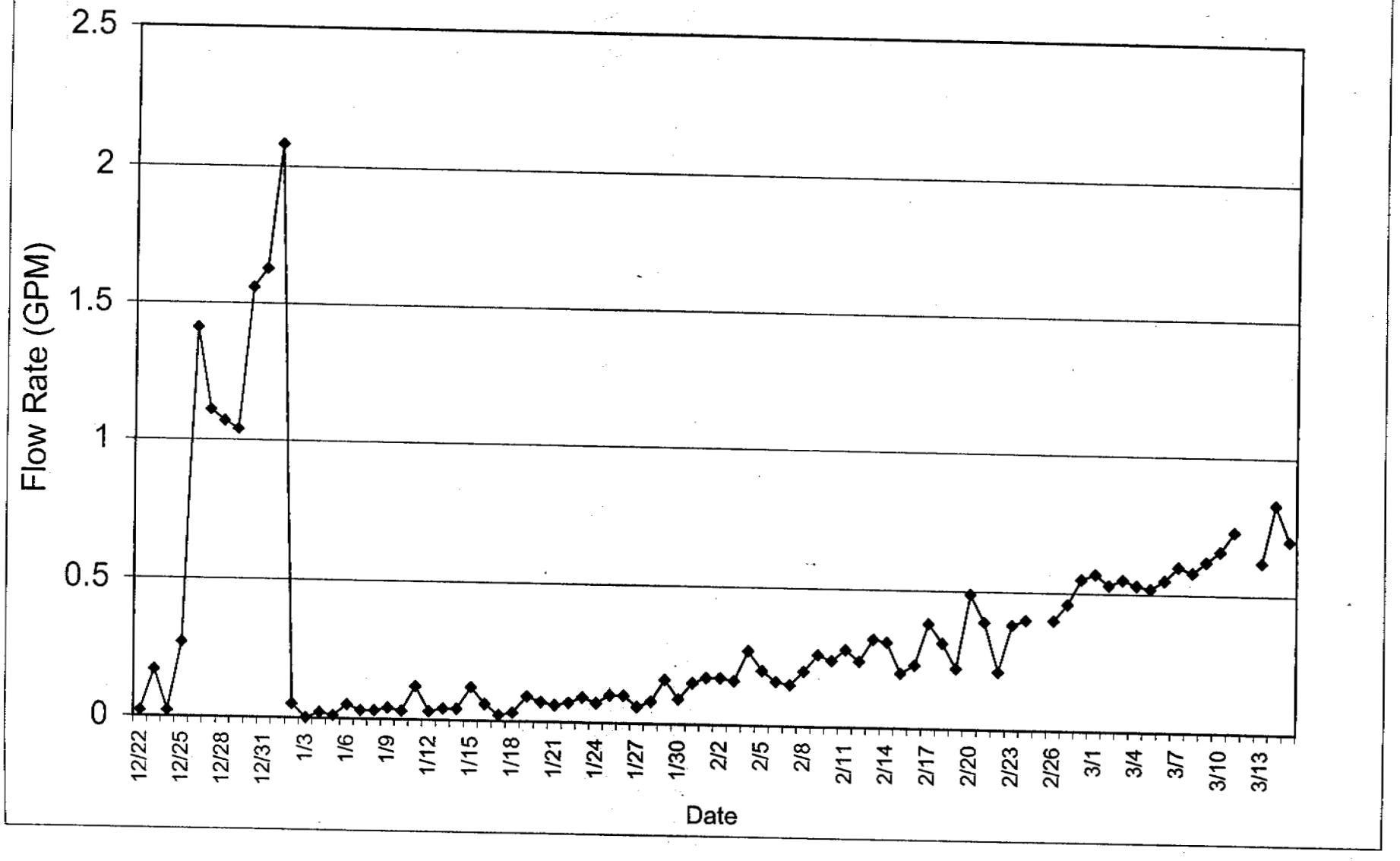


Table 1. Mound Plume Piezometer water levels (in feet below top of casing)

Date	12/29/98	1/15/99	1/22/99	01/27/99	1/28/99	2/4/99	02/23/99	3/1/99
Trench Piezometers								
P1' (East)	Dry	NM	NM	Dry	NM	NM	Dry	NM
P2'	10.55	NM	NM	10.56	NM	NM	10.92	NM
P3'	7.92	NM	NM	7.95	NM	NM	8.35	NM
P4'	7.98	NM	NM	8.01	NM	NM	8.38	NM
P5' (West)	10.88	NM	NM	11.00	NM	NM	NM	NM
Collection Sump	7.07	7.00	7.04	7.10	7.07	7.12	NM	7.56
Groundwater Piezometers								
15199	NM	11.53	10.57	NM	11.12	10.51	NM	8.97
15299	NM	12.49	12.29	NM	12.87	12.76	NM	12.50
15399	NM	10.47	9.83	NM	10.54	9.91	NM	8.12
15499	NM	2.61	2.77	NM	2.74	2.71	NM	2.79
15599	NM	10.20	9.94	NM	10.53	10.58	NM	DRY
15699	NM	11.24	9.91	NM	10.52	9.54	NM	12.01
15799	NM	11.29	10.88	NM	11.58	11.15	NM	11.49
3586	NM	7.87	8.03	NM	7.99	7.94	NM	7.85

NM = Not measured

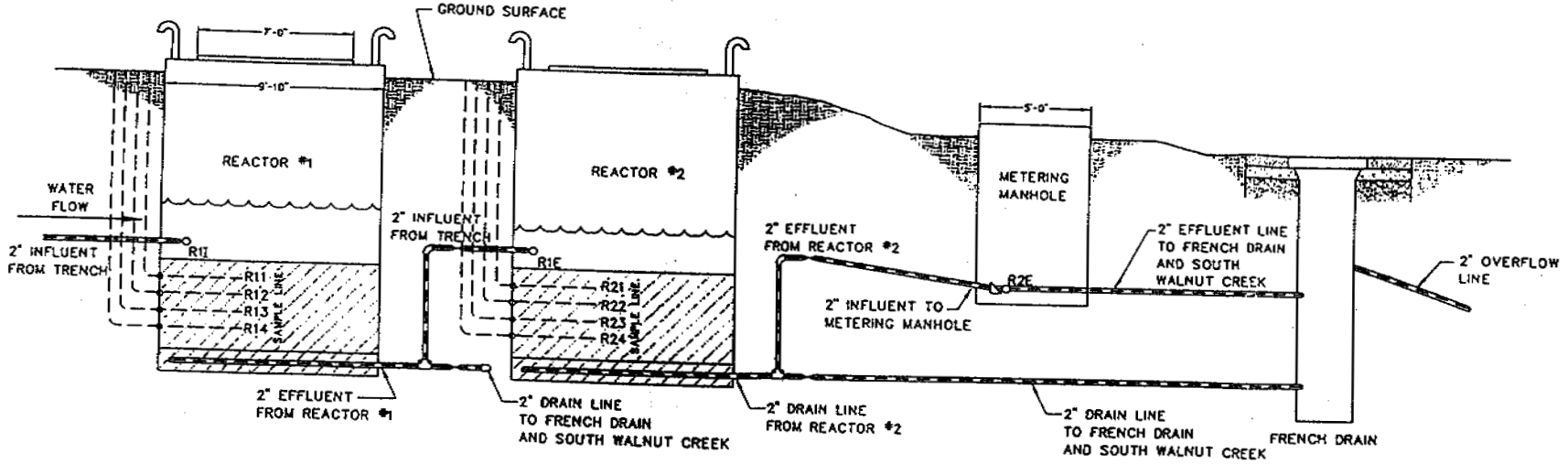
Samples were collected twice in December, 1998, and once per month for a total of four sampling events as of March 1999. Four sets of sample results were received this quarter and are provided in Appendix A. As of the report date, the data has not been verified or validated and a data quality assessment has not been conducted. Three sets of influent samples were collected for later statistical analysis. The first sample collected from each set is used for the following summaries. The results indicate that the volatile organic compounds (VOCs) are being removed within the first foot of reactive iron, with concentrations of trichloroethene, tetrachloroethene, and carbon tetrachloride showing significant decrease from the influent sample port to the first sample port. Concentrations of VOCs are low to non-detect in samples collected from the second, third, and fourth sample ports. Figure 3 shows the sampling locations within the treatment cells.

December 10, 1998 Sampling Event: Contaminants of concern include carbon tetrachloride, chloroform, cis 1,2-dichlorethene, tetrachloroethene, 1,1,1-trichloroethane, trichloroethene, and methylene chloride. Samples collected at the effluent from the first treatment cell show that all of these VOCs were reduced to levels below the RFCA Tier II Groundwater Action Levels at this location (see Table 2 and Figure 4).

Table 2. Summary of the December 10, 1998 Sampling Event

Contaminant	Average Influent Conc. (ug/l)	Effluent from Reactor 1 Concentrations (ug/l)	RFCA Groundwater Tier II Action levels (ug/l)
Carbon Tetrachloride	39.5	ND	5
Chloroform	16	1.7	100
cis 1,2-dichloroethene	25	1.8	70
Tetrachloroethene	34.5	0.25 J	5
1,1,1-Trichloroethane	3.6	ND	200
Trichloroethene	65	0.39 J	5
Methylene Chloride	1.3	2.7 J	5
Total Uranium	<MDA	0.552	10 pCi/l

ND = Not detected at the detection limit for this analysis
J = Detected below detection limit for analysis
<MDA = Below the minimum detectectable activity



LEGEND

- REACTIVE IRON
- SAMPLE LOCATION
- WATER LINE
- SAMPLE LINE

NOT TO SCALE

Figure 3

Sample Locations Within the Treatment Cells

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Figure 4 **MOUND PLUME TREATMENT RESULTS By Sample Locations--12/10/98**

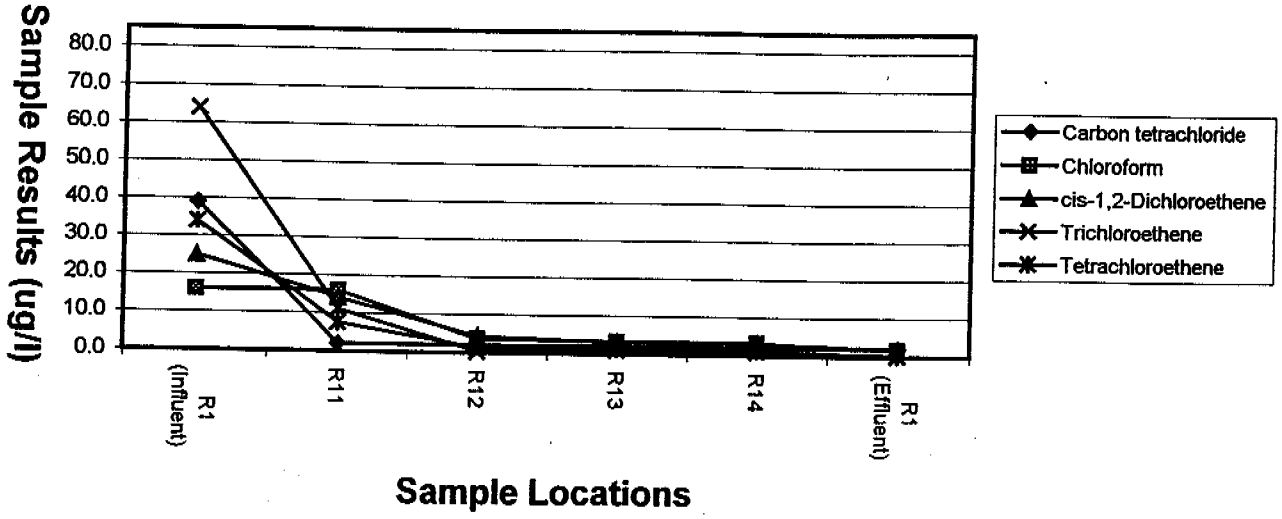
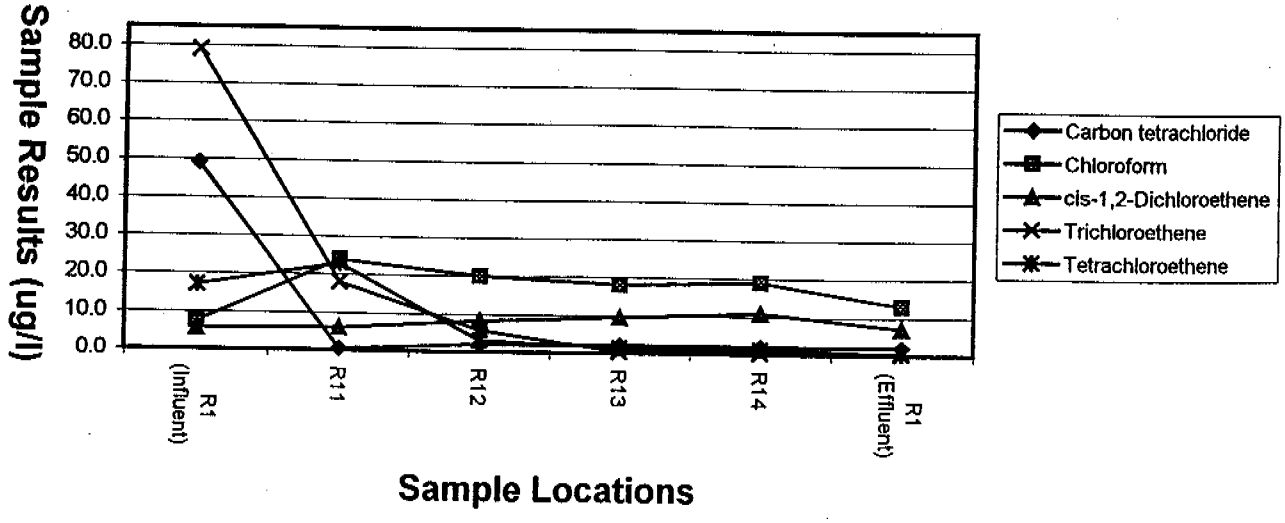


Figure 5 **MOUND PLUME TREATMENT RESULTS By Sample Locations--12/29/98-12/30/98**



December 29-30, 1998 Sampling Event: All VOCs were reduced below the RFCA Groundwater Tier II Action Levels as shown below in Table 3 and on Figure 5.

Table 3. Summary of the December 29-30, 1998 Sampling Event

Contaminant	Average Influent Conc. (ug/l)	Effluent from Reactor 1 Concentrations (ug/l)	RFCA Groundwater Tier II Action levels (ug/l)
Carbon Tetrachloride	49.3	ND	5
Chloroform	7.4	13	100
cis 1,2-dichloroethene	5.6	7.1	70
Tetrachloroethene	17.3	0.28 J	5
1,1,1-Trichloroethane	3.5	ND	200
Trichloroethene	19.3	0.51 J	5
Total Uranium	9.5 pCi/l	<MDA	10 pCi/l

ND = Not detected at the detection limit for this analysis
J = Detected below detection limit for analysis
<MDA = Below the minimum detectectable activity

January 27, 1999 Sampling Event: All VOCs were reduced below the Groundwater Tier II Action Levels, as shown below in Table 4 and on Figure 6. However the effluent sample showed an increase from the influent concentration for methylene chloride and acetone. Acetone is a common lab contaminant, has not been encountered anywhere else in the system and is unlikely to be a treatment reaction product. Methylene chloride is found in the influent, but at a lower amount than within the effluent. Methylene chloride is also a common lab contaminant, but it also might be due to a reaction within the treatment system. Regardless of the origin, the concentrations are below action levels. It is assumed that because these are common solvents used in analytical laboratories, the levels detected are a result of cross contamination within the analytical testing lab.

Table 4. Summary of the January 27, 1999 Sampling Event

Contaminant	Average Influent Conc. (ug/l)	Effluent from Reactor 1 Concentrations (ug/l)	RFCA Groundwater Tier II Action levels (ug/l)
Carbon Tetrachloride	42	ND	5
Chloroform	12.7	0.66	100
cis 1,2-dichloroethene	22	2.6	70
Tetrachloroethene	28	ND	5
1,1,1-Trichloroethane	3.8	ND	200
Trichloroethene	57	ND	5
Methylene Chloride	0.61 J	1.8 J	5
Acetone	ND	4.2 J	3,650
Total Uranium	13.4 pCi/l	0.132 pCi/l	10 pCi/l

ND = Not detected at the detection limit for this analysis
J = Detected below detection limit for analysis
B = Contaminant also detected in analytical lab blank, indicating possible lab contamination.

February 23, 1999 Sampling Event: All VOCs were reduced below the Groundwater Tier II Action Levels, as shown below in Table 5 and on Figure 7. However the influent sample contained acetone and methylene chloride and these were also detected in the blank sample run by the analytical lab. While the effluent sample also showed an increase from the influent concentration for methylene chloride, both acetone and methylene chloride were also detected in the blank sample run by the lab for the effluent samples. These contaminant concentrations are below action levels, and are most likely to be from contamination within the analytical testing lab.

Figure 6 **MOUND PLUME TREATMENT RESULTS By Sample Locations--1/27/99-1/28/99**

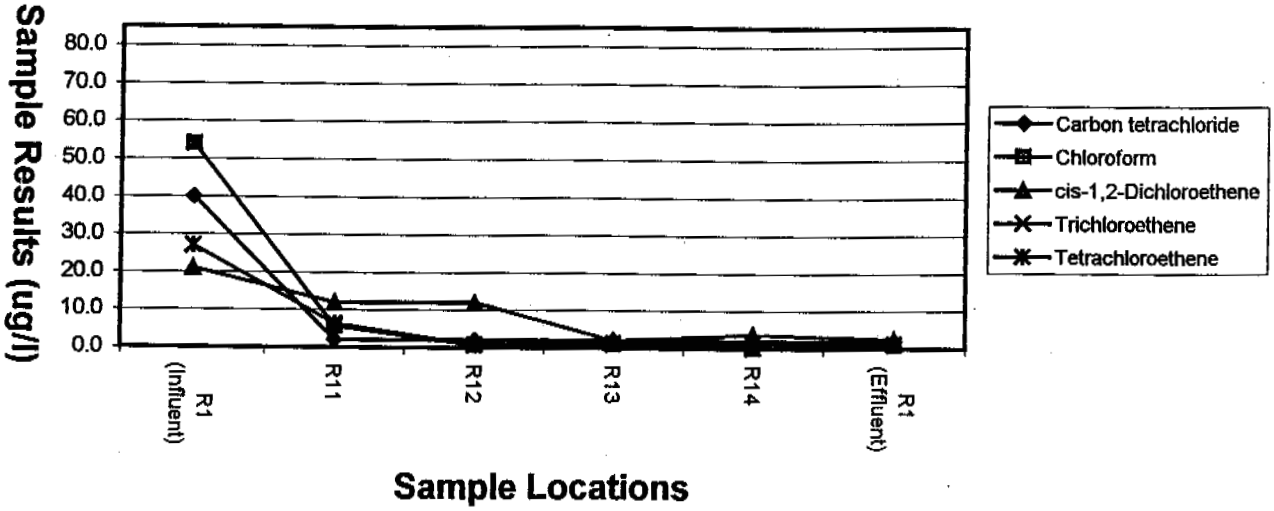


Figure 7 **MOUND PLUME TREATMENT RESULTS By Sample Locations--2/23/99**

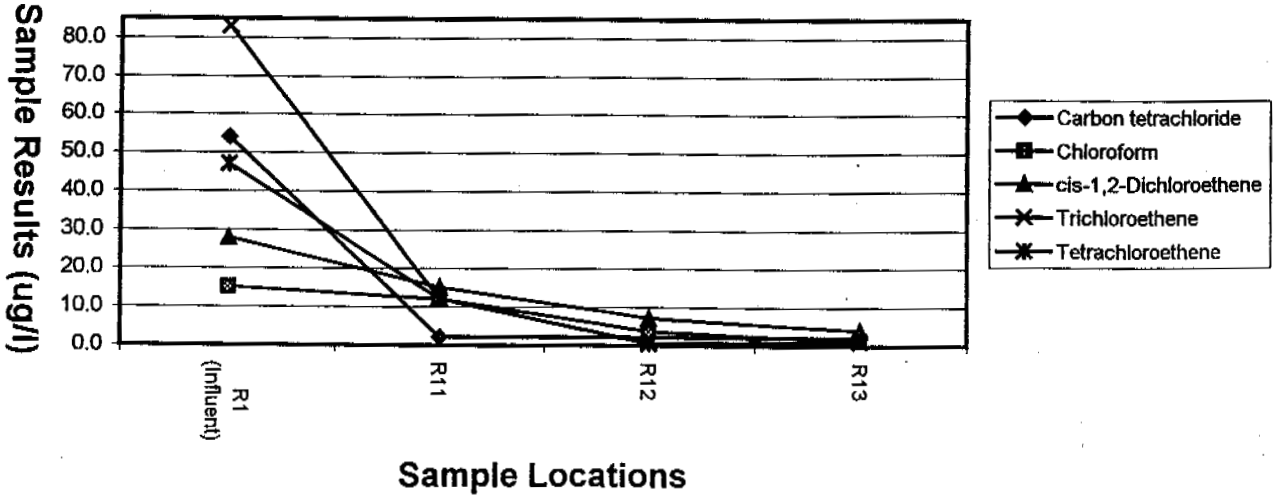


Table 5. Summary of the February 23, 1999 Sampling Event

Contaminant	Average Influent Conc. (ug/l)	Effluent from Reactor 1 Concentrations (ug/l)	RFCA Groundwater Tier II Action levels (ug/l)
Carbon Tetrachloride	54	ND	5
Chloroform	15	1.4	100
cis 1,2-dichloroethene	28	4.0	70
Tetrachloroethene	47	ND	5
1,1,1-Trichloroethane	4.9	ND	200
Trichloroethene	83	ND	5
Methylene Chloride	1.5 JB	4.7 JB	5
Acetone	12 JB	1.4 JB	3,650

ND = Not detected at the detection limit for this analysis
J = Detected below detection limit for analysis

CONCLUSIONS

The Mound Site Plume Treatment Project is fully operational and treating contaminated groundwater to below the specified system performance requirements. Ongoing maintenance, raking the iron filings and retrieving flow rate and water level data, are the only required activities. Sampling will continue at regular intervals to verify the performance of the treatment system. For the next quarter, April through June 1999, no changes in the system are expected.

REFERENCES

DOE, 1996, *Final Rocky Flats Cleanup Agreement*, Rocky Flats Environmental Technology Site, Golden, CO, July.

DOE, 1997, *Final Mound Site Plume Decision Document*, RF/RMRS-97-024, September.

Table 3. Mound Plume Treatment System Analytical Results (Preliminary) in ug/l

Appendix A

ocation/Date	Top of Reactor 1 (Influent) 12/10/98		Top of Reactor 1 (Influent) 12/10/98		Top of Reactor 1 (Influent) 12/10/98		Trip Blank 12/10/98		Reactor 1 Sample Line R11 12/10/98		Reactor 1 Sample Line R11 12/10/98		Reactor 1 Sample Line R11 12/10/98		Reactor 1 Sample Line R12 12/10/98		Reactor 1 Sample Line R13 12/10/98	
ample Number	ETI-R1I-S-01-121098		ETI-R1I-S-02-121098		ETI-R1I-S-03-121098		ETI-R1I-T-01-121098		ETI-R11-S-01-121098		ETI-R11-S-02-121098		ETI-R11-S-03-121098		ETI-R12-S-01-121098		ETI-R13-S-01-121098	
arameter	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit
cetone	ND	20.0	ND	20.0	ND	20.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0
enzene	ND	2.0	ND	2.0	ND	2.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
romodichloromethane	ND	2.0	ND	2.0	ND	2.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
romoform	ND	2.0	ND	2.0	ND	2.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
romomethane	ND	4.0	ND	4.0	ND	4.0	ND	2.0	ND	2.0	ND	2.0	ND	2.0	ND	2.0	ND	2.0
Butanone (MEK)	ND	10.0	ND	10.0	ND	10.0	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	5.0
arbon disulfide	ND	2.0	ND	2.0	ND	2.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
arbon tetrachloride	39	4.2	40	4.2	40	4.2	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1
hlorobenzene	ND	2.0	ND	2.0	ND	2.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
hloroethane	ND	4.0	ND	4.0	ND	4.0	ND	2.0	ND	2.0	ND	2.0	ND	2.0	ND	2.0	ND	2.0
hloroform	16	1.0	16	1.0	16	1.0	ND	0.5	16.0	0.5	16	0.5	15	0.5	3.5	0.5	3.2	0.5
hloromethane	ND	4.0	ND	4.0	ND	4.0	ND	2.0	ND	2.0	ND	2.0	ND	2.0	0.20 J	2.0	ND	2.0
bromochloromethane	ND	2.0	ND	2.0	ND	2.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
1-Dichloroethane	1.1 J	2.4	1.1 J	2.4	1.2 J	2.4	ND	1.2	1.2	1.2	1.2	1.2	1.1 J	1.2	0.82 J	1.2	0.79 J	1.2
2-Dichloroethane	0.63 J	2.0	0.63 J	2.0	0.65 J	2.0	ND	1.0	0.45 J	1.0	0.44 J	1.0	0.43 J	1.0	0.36 J	1.0	0.35 J	1.0
l-Dichloroethene	3.5	2.0	3.7	2.0	3.7	2.0	ND	1.2	1.5	1.0	1.5	1.0	1.5	1.0	0.29 J	1.0	0.22 J	1.0
s-1,2-Dichloroethene	25	2.4	25	2.4	25	2.4	ND	1.0	14	1.2	13	1.2	13	1.2	4.3	1.2	3.1	1.2
ns-1,2-Dichloroethene (total)	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5
2-Dichloroethene (total)	23	2.0	23	2.0	23	2.0	ND	1.0	12	1.0	12	1.0	12	1.0	4.0	1.0	2.9	1.0
2-Dichloropropane	ND	2.0	ND	2.0	ND	2.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
s-1,3-Dichloropropene	ND	2.0	ND	2.0	ND	2.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
ns-1,3-Dichloropropene	ND	2.0	ND	2.0	ND	2.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
ylbenzene	ND	2.0	ND	2.0	ND	2.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Hexanone	ND	10.0	ND	10.0	ND	10.0	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	5.0
thylene chloride	0.61 J	10.0	1.9 J	10.0	1.4 J	10.0	0.63 J	5.0	3.0 J	5.0	2.6 J	5.0	3.1 J	5.0	3.9 J	5.0	3.4 J	5.0
Methyl-2-pentanone	ND	10.0	ND	10.0	ND	10.0	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	5.0
rene	ND	2.0	ND	2.0	ND	2.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
,2,2-Tetrachloroethane	ND	2.0	ND	2.0	ND	2.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
trachloroethene	34	2.8	35	2.8	35	2.8	ND	1.4	7.4	1.4	7.5	1.4	7.5	1.4	ND	1.0	ND	1.0
uene	ND	2.0	ND	2.0	ND	2.0	ND	1.0	0.11 J	1.0	0.12 J	1.0	ND	1.0	ND	1.4	ND	1.4
,1-Trichloroethane	3.6	1.6	3.6	1.6	3.7	1.6	ND	0.8	0.59 J	0.8	0.57 J	0.8	0.56 J	0.8	ND	0.8	ND	0.8
,2-Trichloroethane	ND	2.0	ND	2.0	ND	2.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
hloroethene	64	2.0	66	2.0	66	2.0	ND	1.0	11	1.0	11	1.0	11	1.0	ND	1.0	ND	1.0
yl chloride	0.36 J	2.2	0.36 J	2.2	0.37 J	2.2	ND	1.1	0.28 J	1.1	0.28 J	1.1	0.30 J	1.1	0.21 J	1.1	0.16 J	1.1
anes (total)	ND	2.0	ND	2.0	ND	2.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Radionuclide	Result	Error/MDA	Result	Error/MDA	Result	Error/MDA			Result	Error/MDA	Result	Error/MDA	Result	Error/MDA	Result	Error/MDA	Result	Error/MDA
al Uranium (pCi/l)	2.81 10^{-2}	6.22 10^{-3} / 7.29 10^{-2}	17.4	3.8 / 7.29 10^{-2}	2.17 10^{-2}	4.81 10^{-3} / 7.29 10^{-2}			17.3	3.82 / 7.29 10^{-2}	2.66 10^{-2}	5.87 10^{-3} / 7.29 10^{-2}	17.0	3.77 / 7.29 10^{-2}	7.47 10^{-3}	2.09 10^{-3} / 7.29 10^{-2}	7.78 10^{-3}	2.18 10^{-3} / 7.29 10^{-2}

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Table 3. Mound Plume Treatment System Analytical Results (Preliminary) in ug/l

ocation/Date	Reactor 1 Sample Line R14		Reactor 1 (Effluent)		Top of Reactor 1 (Influent)		Top of Reactor 1 (Influent)		Top of Reactor 1 (Influent)		Trip Blank		Field Blank		Reactor 1 (Effluent)		Reactor 1 Sample Line R11	
	12/10/98		12/10/98		12/29/98		12/29/98		12/29/98		12/30/98		12/30/98		12/30/98		12/29/98	
ample Number	ETI-R14-S-01-121198		ETI-R1E-S-01-121198		ETI-R1I-S-01		ETI-R1I-S-02		ETI-R1I-S-03		ETI-R1I-T-01		ETI-R1I-F-01		ETI-R1E-S-01		ETI-R11-S-01	
arameter	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit
cetone	7.9 J	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0
enzene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
romodichloromethane	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
romoform	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
romomethane	ND	2.0	ND	2.0	ND	2.0	ND	2.0	ND	2.0	ND	2.0	ND	2.0	ND	2.0	ND	2.0
Butanone (MEK)	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	5.0
arbon disulfide	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
arbon tetrachloride	ND	2.1	ND	2.1	49	2.1	49	2.1	50	2.1	ND	2.1	ND	2.1	ND	2.1	0.45 J	2.1
lorobenzene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
loroethane	ND	2.0	ND	2.0	ND	2.0	ND	2.0	ND	2.0	ND	2.0	ND	2.0	ND	2.0	ND	2.0
loroform	3.2	0.5	1.7	0.5	7.4	0.5	7.3	0.5	7.5	0.5	ND	0.5	ND	0.5	13	0.5	24	0.5
loromethane	ND	2.0	ND	2.0	ND	2.0	ND	2.0	ND	2.0	ND	2.0	ND	2.0	ND	2.0	ND	2.0
bromochloromethane	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
1-Dichloroethane	0.79 J	1.2	0.56 J	1.2	0.36 J	1.2	0.37 J	1.2	0.36 J	1.2	ND	1.2	ND	1.2	0.88 J	1.2	0.54 J	1.2
2-Dichloroethane	0.34 J	1.0	0.25 J	1.0	0.21 J	1.0	0.21 J	1.0	0.21 J	1.0	ND	1.0	ND	1.0	0.40 J	1.0	0.25 J	1.0
1-Dichloroethene	0.29 J	1.0	0.15 J	1.0	0.98 J	1.0	1.0	1.0	0.98 J	1.0	ND	1.0	ND	1.0	0.81 J	1.0	0.92 J	1.0
s-1,2-Dichloroethene	3.3	1.2	1.8	1.2	5.6	1.2	5.6	1.2	5.6	1.2	ND	1.2	ND	1.2	7.1	1.2	6.0	1.2
ns-1,2-Dichloroethene	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5
-Dichloroethene (total)	3.0	1.0	1.7	1.0	ND	1.0	5.2	1.0	5.2	1.0	ND	1.0	ND	1.0	6.6	1.0	5.5	1.0
-Dichloropropane	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
s-1,3-Dichloropropene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
ns-1,3-Dichloropropene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
ylbenzene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
lexanone	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	5.0
thylene chloride	3.5 J	5.0	2.7 J	5.0	0.26 J	5.0	0.26 J	5.0	ND	5.0	ND	5.0	0.23 J	5.0	1.4 J	5.0	0.94 J	5.0
Methyl-2-pentanone	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	5.0
rene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
,2,2-Tetrachloroethane	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
trachloroethene	ND	1.4	0.25 J	1.4	17	1.4	17	1.4	18	1.4	ND	1.4	ND	1.4	0.28 J	1.4	23	1.4
uene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
,1-Trichloroethane	ND	0.8	ND	0.8	3.4	0.8	3.5	0.8	3.5	0.8	ND	0.8	ND	0.8	ND	0.8	1.9	0.8
,2-Trichloroethane	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
chloroethene	ND	1.0	0.39 J	1.0	19	1.0	19	1.0	20	1.0	ND	1.0	ND	1.0	0.51 J	1.0	16	1.0
yl chloride	0.18 J	1.1	ND	1.1	0.32 J	1.1	0.30 J	1.1	0.30 J	1.1	ND	1.1	ND	1.1	0.27 J	1.1	0.26 J	1.1
enes (total)	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Radionuclide	Result	Error/MDA	Result	Error/MDA	Result	Error/MDA	Result	Error/MDA	Result	Error/MDA	Result	Error/MDA	Result	Error/MDA	Result	Error/MDA	Result	Error/MDA
al Uranium (pCi/l)	$1.33\ 10^{-1}$	$1.80\ 10^{-2}$ / $7.29\ 10^{-2}$	$5.52\ 10^{-1}$	$7.42\ 10^{-2}$ / $7.29\ 10^{-2}$	9.5	1.28 / $7.29\ 10^{-2}$	9.66	1.30 / $7.29\ 10^{-2}$	$2.21\ 10^{-2}$	$6.18\ 10^{-3}$ / $7.29\ 10^{-2}$			$1.17\ 10^{-2}$	$2.61\ 10^{-2}$ / $7.29\ 10^{-2}$	$3.18\ 10^{-1}$	$6.99\ 10^{-2}$ / $7.29\ 10^{-2}$	$1.96\ 10^{-2}$	$5.54\ 10^{-3}$ / $7.29\ 10^{-2}$

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Table 3. Mound Plume Treatment System Analytical Results (Preliminary) in ug/l

Location/Date	Reactor 1 Sample Line R11 12/29/98		Reactor 1 Sample Line R11 12/29/98		Reactor 1 Sample Line R12 12/29/98		Reactor 1 Sample Line R13 12/29/98		Reactor 1 Sample Line R14 12/29/98		Top of Reactor 1 (Influent) 1/27/99		Top of Reactor 1 (Influent) 1/27/99		Top of Reactor 1 (Influent) 1/27/99		Trip Blank 1/28/99		Field Blank 1/27/99	
Sample Number	ETI-R11-S-02		ETI-R11-S-03		ETI-R12-S-01		ETI-R13-S-01		ETI-R14-S-01		ETI-R10-S-01-12799		ETI-R10-S-02-12799		ETI-R10-S-03-12799		ETI-R10-T-01-12899		ETI-R10-F-01-12799	
Parameter	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit
Acetone	ND	10.0	ND	10.0	ND	10.0	ND	10.0	2.1 J	10.0	ND	25	ND	25	ND	25	ND	10.0	ND	10.0
Benzene	ND	1.0	ND	1.0	0.22 J	1.0	0.22 J	1.0	0.16 J	1.0	ND	2.5	ND	2.5	ND	2.5	ND	1.0	ND	1.0
Bromodichloromethane	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	2.5	ND	2.5	ND	2.5	ND	1.0	ND	1.0
Bromoform	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	2.5	ND	2.5	ND	2.5	ND	1.0	ND	1.0
Bromomethane	ND	2.0	ND	2.0	ND	2.0	ND	2.0	ND	2.0	ND	5.0	ND	5.0	ND	5.0	ND	2.0	ND	2.0
2-Butanone (MEK)	ND	5.0	ND	5.0	ND	5.0	ND	5.0	1.2 J	5.0	ND	12	ND	12	ND	12	ND	5.0	ND	5.0
Carbon disulfide	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	2.5	ND	2.5	ND	2.5	ND	1.0	ND	1.0
Carbon tetrachloride	0.49 J	2.1	50	2.1	ND	2.1	ND	2.1	ND	2.1	40	5.2	39	5.2	47	5.2	ND	2.1	ND	2.1
Chlorobenzene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	2.5	ND	2.5	ND	2.5	ND	1.0	ND	1.0
Chloroethane	ND	2.0	ND	2.0	ND	2.0	ND	2.0	ND	2.0	ND	5.0	ND	5.0	ND	5.0	ND	2.0	ND	2.0
Chloroform	25	0.5	7.5	0.5	20	0.5	18	0.5	19	0.5	12	1.2	12	1.2	14	1.2	ND	0.5	ND	0.5
Chloromethane	ND	2.0	ND	2.0	ND	2.0	ND	2.0	ND	2.0	ND	5.0	ND	5.0	ND	5.0	ND	2.0	ND	2.0
Dibromochloromethane	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	2.5	ND	2.5	ND	2.5	ND	1.0	ND	1.0
1,1-Dichloroethane	0.55 J	1.2	0.38 J	1.2	0.77 J	1.2	0.89 J	1.2	1.0 J	1.2	1.6 J	3.0	1.6 J	3.0	1.9 J	3.0	ND	1.2	ND	1.2
1,2-Dichloroethane	0.24 J	1.0	0.21 J	1.0	0.33 J	1.0	0.39 J	1.0	0.44 J	1.0	0.51 J	2.5	0.48 J	2.5	0.53 J	2.5	ND	1.0	ND	1.0
1,1-Dichloroethene	0.97 J	1.0	0.98 J	1.0	1.0	1.0	1.1	1.0	1.4	1.0	3.6	2.5	3.6	2.5	4.4	2.5	ND	1.0	ND	1.0
cis-1,2-Dichloroethene	6	1.2	5.6	1.2	8.2	1.2	9.4	1.2	11	1.2	21	3.0	21	3.0	24	3.0	ND	1.2	ND	1.2
trans-1,2-Dichloroethene	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	1.2	ND	1.2	ND	1.2	ND	0.5	ND	0.5
1,2-Dichloroethene (total)	5.5	1.0	5.2	1.0	7.6	1.0	8.8	1.0	10	1.0	21	2.5	21	2.5	24	2.5	ND	1.0	ND	1.0
1,2-Dichloropropane	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	2.5	ND	2.5	ND	2.5	ND	1.0	ND	1.0
cis-1,3-Dichloropropene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	2.5	ND	2.5	ND	2.5	ND	1.0	ND	1.0
trans-1,3-Dichloropropene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	2.5	ND	2.5	ND	2.5	ND	1.0	ND	1.0
Ethylbenzene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	2.5	ND	2.5	ND	2.5	ND	1.0	ND	1.0
2-Hexanone	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	12	ND	12	ND	12	ND	5.0	ND	5.0
Methylene chloride	0.66 J	5.0	ND	5.0	1.4 J	5.0	1.5 J	5.0	1.5 J	5.0	0.60 J	12	0.62 J	12	ND	12	ND	5.0	ND	5.0
4-Methyl-2-pentanone	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	12	ND	12	ND	12	ND	5.0	ND	5.0
Styrene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	2.5	ND	2.5	ND	2.5	ND	1.0	ND	1.0
1,1,2,2-Tetrachloroethane	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	2.5	ND	2.5	ND	2.5	ND	1.0	ND	1.0
Tetrachloroethene	23	1.4	16	1.4	3.0	1.4	ND	1.4	ND	1.4	27	3.5	26	3.5	32	3.5	ND	1.4	ND	1.4
Toluene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	2.5	ND	2.5	ND	2.5	ND	1.0	ND	1.0
1,1,1-Trichloroethane	1.9	0.8	3.5	0.8	0.54 J	0.8	0.27 J	0.8	0.44 J	0.8	3.6	2.0	3.5	2.0	4.3	2.0	ND	0.8	ND	0.8
1,1,2-Trichloroethane	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	2.5	ND	2.5	ND	2.5	ND	1.0	ND	1.0
Trichloroethene	19	1.0	20	1.0	5.7	1.0	0.26 J	1.0	0.35 J	1.0	55	2.5	54	2.5	62	2.5	ND	1.0	ND	1.0
Vinyl chloride	0.29 J	1.1	0.30 J	1.1	0.31 J	1.1	0.32 J	1.1	0.32 J	1.1	ND	2.8	ND	2.8	ND	2.8	ND	1.1	ND	1.1
Xylenes (total)	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	2.5	ND	2.5	ND	2.5	ND	1.0	ND	1.0
Radionuclide	**Result**	**Error/MDA**	**Result**	**Error/MDA**	**Result**	**Error/MDA**	**Result**	**Error/MDA**	**Result**	**Error/MDA**	**Result**	**Error/MDA**	**Result**	**Error/MDA**	**Result**	**Error/MDA**	**Result**	**Error/MDA**	**Result**	**Error/MDA**
Total Uranium (pCi/l)	$2.10\ 10^{-2}$	$4.74\ 10^{-3}$ / $7.29\ 10^{-2}$	9.49	2.10 / $7.29\ 10^{-2}$	$1.39\ 10^{-2}$	$3.89\ 10^{-3}$ / $7.29\ 10^{-2}$	$1.80\ 10^{-2}$	$5.04\ 10^{-3}$ / $7.29\ 10^{-2}$	$1.18\ 10^{-2}$	$3.32\ 10^{-3}$ / $7.29\ 10^{-2}$	12.4	2.70 / $7.29\ 10^{-2}$	13.4	1.80 / $7.29\ 10^{-2}$	13.5	1.80 / $7.29\ 10^{-2}$			$1.92\ 10^{-2}$	$5.40\ 10^{-3}$ / $7.29\ 10^{-2}$

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Table 3. Mound Plume Treatment System Analytical Results (Preliminary) In ug/l

ocation/Date	Reactor 1 Sample Line R11 1/27/99		Reactor 1 Sample Line R11 1/27/99		Reactor 1 Sample Line R11 1/27/99		Reactor 1 Sample Line R12 1/27/99		Reactor 1 Sample Line R13 1/27/99		Reactor 1 Sample Line R14 1/27/99		Reactor 1 (Effluent) 1/28/99		Reactor 1 (Influent) 2/23/99		Reactor 1 (Influent) 2/23/99		Reactor 1 (Influent) 2/23/99	
mple Number	ETI-R11-S-01-12799		ETI-R11-S-02-12799		ETI-R11-S-03-12799		ETI-R12-S-01-12799		ETI-R13-S-01-12799		ETI-R14-S-01-12799		ETI-R1E-S-01-12899		ETI-R10-S-01-022399		ETI-R10-S-02-022399		ETI-R10-S-03-022399	
rameter	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit
etone	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0	4.2 J	10.0	12 JB	50	2.5 JB	20	ND	20
nzene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	5.0	ND	2.0	ND	2.0
omodichloromethane	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	5.0	ND	2.0	ND	2.0
omoform	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	5.0	ND	2.0	ND	2.0
omomethane	ND	2.0	ND	2.0	ND	2.0	ND	2.0	ND	2.0	ND	2.0	ND	2.0	ND	10	ND	4.0	ND	4.0
Butanone (MEK)	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	5.0	5.0 J	25	ND	10	ND	10
rbon disulfide	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	5.0	ND	2.0	ND	2.0
rbon tetrachloride	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1	54	10	55	4.2	57	4.2
lorobenzene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	5.0	ND	2.0	ND	2.0
loroethane	ND	2.0	0.20 J	2.0	ND	2.0	ND	2.0	ND	2.0	ND	2.0	ND	2.0	ND	10	ND	4.0	ND	4.0
loroform	8.7	0.5	8.8	0.5	9.0	0.5	1.6	0.5	0.41 J	0.5	0.64	0.5	0.66	0.5	15	2.5	14	1.0	14	1.0
loromethane	ND	2.0	ND	2.0	ND	2.0	ND	2.0	ND	2.0	ND	2.0	ND	2.0	ND	10	ND	4.0	ND	4.0
romochloromethane	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	5.0	ND	2.0	ND	2.0
-Dichloroethane	2.4	1.2	2.4	1.2	2.4	1.2	1.8	1.2	1.3	1.2	0.99 J	1.2	0.69 J	1.2	1.8 J	6.0	1.7 J	2.4	1.7 J	2.4
-Dichloroethane	0.41 J	1.0	0.42 J	1.0	0.48 J	1.0	0.37 J	1.0	0.25 J	1.0	0.26 J	1.0	0.22 J	1.0	ND	5.0	0.52 J	2.0	0.50 J	2.0
-Dichloroethene	1.3	1.0	1.3	1.0	1.3	1.0	3.6	1.0	ND	1.0	0.33 J	1.0	ND	1.0	5.6	5.0	5.5	2.0	5.8	2.0
-1,2-Dichloroethene	12	1.2	12	1.2	12	1.2	ND	1.2	2.0	1.2	3.7	1.2	2.6	1.2	28	6.0	27	2.4	27	2.4
ns-1,2-Dichloroethene	ND	0.5	ND	0.5	ND	0.5	3.6	0.5	ND	0.5	ND	0.5	ND	0.5	ND	2.5	ND	1.0	ND	1.0
-Dichloroethene (total)	12	1.0	12	1.0	12	1.0	ND	1.0	2.1	1.0	3.8	1.0	2.7	1.0	28	5.0	27	2.0	27	2.0
-Dichloropropane	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	5.0	ND	2.0	ND	2.0
-1,3-Dichloropropene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	5.0	ND	2.0	ND	2.0
ns-1,3-Dichloropropene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	5.0	ND	2.0	ND	2.0
ylbenzene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	5.0	ND	2.0	ND	2.0
lexanone	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	25	ND	10	ND	10
thylene chloride	3.3 J	5.0	3.2 J	5.0	2.9 J	5.0	3.0 J	5.0	2.7 J	5.0	2.5 J	5.0	1.8 J	5.0	1.5 JB	25	0.52 JB	10	0.54 JB	10
ethyl-2-pentanone	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	25	ND	10	ND	10
rene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	5.0	ND	2.0	ND	2.0
,2,2-Tetrachloroethane	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	5.0	ND	2.0	ND	2.0
rachloroethene	6.4	1.4	6.0	1.4	6.2	1.4	0.81 J	1.4	ND	1.4	ND	1.4	ND	1.4	47	7.0	48	2.8	51	2.8
uene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	5.0	ND	2.0	ND	2.0
,1-Trichloroethane	ND	0.8	ND	0.8	ND	0.8	ND	0.8	ND	0.8	ND	0.8	ND	0.8	4.9	4.0	4.8	1.6	4.9	1.6
,2-Trichloroethene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	5.0	ND	2.0	ND	2.0
hloroethene	5.6	1.0	5.6	1.0	5.9	1.0	0.84 J	1.0	ND	1.0	0.23	1.0	ND	1.0	83	5.0	84	2.0	86	2.0
yl chloride	ND	1.1	ND	1.1	ND	1.1	ND	1.1	ND	1.1	ND	1.1	ND	1.1	ND	5.5	ND	2.2	ND	2.2
nes (total)	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	5.0	ND	2.0	ND	2.0
Radionuclide	Result	Error/MDA	Result	Error/MDA	Result	Error/MDA	Result	Error/MDA	Result	Error/MDA	Result	Error/MDA	Result	Error/MDA	Result	Error/MDA	Result	Error/MDA	Result	Error/MDA
al Uranium (pCi/l)	$1.41\ 10^{-2}$	$4.00\ 10^{-3}$ / $7.29\ 10^{-2}$	$1.83\ 10^{-2}$	$5.10\ 10^{-3}$ / $7.29\ 10^{-2}$	$2.58\ 10^{-2}$	$5.80\ 10^{-3}$ / $7.29\ 10^{-2}$	$9.51\ 10^{-3}$	$2.70\ 10^{-3}$ / $7.29\ 10^{-2}$	$2.74\ 10^{-1}$	$3.70\ 10^{-2}$ / $7.29\ 10^{-2}$	$1.11\ 10^{-2}$	$2.60\ 10^{-3}$ / $7.29\ 10^{-2}$	$1.32\ 10^{-1}$	$1.80\ 10^{-2}$ / $7.29\ 10^{-2}$						

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Table 3. Mound Plume Treatment System Analytical Results (Preliminary) in ug/l

Appendix A

Location/Date	Trip Blank		Reactor 1 Sample Line R11		Reactor 1 Sample Line R11		Reactor 1 Sample Line R11		Reactor 1 Sample Line R12		Reactor 1 Sample Line R13	
	2/23/99		2/23/99		2/23/99		2/23/99		2/23/99		2/23/99	
Sample Number	ETI-R10-T-01-022499		ETI-R11-S-01-022399		ETI-R11-S-02-022399		ETI-R11-S-03-022399		ETI-R12-S-01-022399		ETI-R13-S-01-022399	
Parameter	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit
Acetone	ND	10.0	ND	10.0	ND	10.0	2.5 JB	10.0	4.0 JB	10.0	1.4 JB	10.0
Benzene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	0.18 J	1.0	0.16 J	1.0
Bromodichloromethane	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Bromoform	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Bromomethane	ND	2.0	ND	2.0	ND	2.0	ND	2.0	ND	2.0	ND	1.0
2-Butanone (MEK)	ND	5.0	ND	5.0	ND	5.0	ND	5.0	1.2 J	5.0	ND	2.0
Carbon disulfide	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	5.0
Carbon tetrachloride	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	1.0
Chlorobenzene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	2.1
Chloroethane	ND	2.0	ND	2.0	ND	2.0	ND	2.0	ND	2.0	ND	1.0
Chloroform	ND	0.5	12	0.5	13	0.5	13	0.6	3.7	0.5	1.4	0.5
Chloromethane	ND	2.0	ND	2.0	ND	2.0	ND	2.0	ND	2.0	ND	2.0
Dibromochloromethane	ND	1.0	ND	2.0	ND	1.0	ND	1.0	ND	1.0	ND	2.0
1,1-Dichloroethane	ND	1.2	2.3	1.0	2.5	1.2	2.5	1.2	2.2	1.2	2.2	1.0
1,2-Dichloroethane	ND	1.0	0.45 J	1.0	0.50 J	1.0	0.47 J	1.0	0.44 J	1.0	0.40 J	1.2
1,1-Dichloroethene	ND	1.0	2.2	1.0	2.3	1.0	2.4	1.0	0.53 J	1.0	ND	1.0
cis-1,2-Dichloroethene	ND	1.2	15	1.0	17	1.0	16	1.2	7.2	1.2	4.0	1.0
trans-1,2-Dichloroethene	ND	0.5	ND	1.2	ND	1.2	ND	0.5	ND	1.2	ND	1.2
1,2-Dichloroethene (total)	ND	1.0	15	0.5	17	1.2	16	1.2	7.2	0.5	4.0	0.5
1,2-Dichloropropane	ND	1.0	ND	1.0	ND	0.5	ND	1.0	ND	1.0	ND	1.0
cis-1,3-Dichloropropene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
trans-1,3-Dichloropropene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Ethylbenzene	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
2-Hexanone	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Methylene chloride	0.84 JB	5.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
4-Methyl-2-pentanone	ND	5.0	3.4 JB	5.0	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Styrene	ND	1.0	ND	5.0	3.7 JB	5.0	3.7 JB	5.0	4.3 JB	5.0	4.7 JB	5.0
1,1,2,2-Tetrachloroethane	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	5.0
Tetrachloroethene	ND	1.4	12	1.4	13	1.4	13	1.4	0.68 J	1.4	ND	1.0
Toluene	ND	1.0	ND	0.8	ND	1.0	ND	1.0	ND	0.8	ND	1.4
1,1,1-Trichloroethane	ND	0.8	ND	1.0	ND	0.6	ND	0.8	ND	1.0	ND	0.8
1,1,2-Trichloroethane	ND	1.0	ND	1.0	ND	1.0	ND	1.0	0.57 J	1.0	ND	1.0
Trichloroethene	ND	1.0	12	1.0	13	1.0	13	1.0	0.31 J	1.1	0.29 J	1.1
Vinyl chloride	ND	1.1	0.34 J	1.1	0.38 J	1.1	0.38 J	1.1	ND	1.0	ND	1.0
Xylenes (total)	ND	1.0	ND	1.0	ND	1.0	ND	1.0				
Radionuclide	Result	Error/MDA	Result	Error/MDA	Result	Error/MDA	Result	Error/MDA	Result	Error/MDA	Result	Error/MDA
Total Uranium (pCi/l)												

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